

## Claims

1. An alopecia healing apparatus comprising:
  - a case provided at a first end thereof with a handle section, and a second end thereof with a massage section having a plurality of massage protrusions;
  - 5 a light radiating section including a plurality of LEDs, which are regularly aligned behind the massage protrusions of the case in equidistance;
  - a laser radiating section aligned in the case corresponding to the massage section so as to radiate low-level laser beam;
  - a vibration device installed in the case so as to vibrate the case;
  - 10 a control section including a microcomputer for controlling operations of the light radiating section, the laser radiating section and the vibration device; and
  - a power source for supplying power to the light radiating section and the laser radiating section.
- 15 2. The alopecia healing apparatus as claimed in claim 1, wherein the handle section is inclined from the massage section at an angle of 15° so as to enlarge a contact area between the massage section and a scalp.
- 20 3. The alopecia healing apparatus as claimed in claim 1, wherein the massage protrusions are made of soft synthetic resin in order to allow a user to feel pleasant when combing a user's hair or when massaging a user's scalp, and a tip of each massage protrusion is rounded.
- 25 4. The alopecia healing apparatus as claimed in claim 1 or 3, wherein length of the massage protrusions is gradually increased from a center to upper and lower directions thereof so that uppermost and lowest protrusions have longest length.
- 30 5. The alopecia healing apparatus as claimed in claim 1, wherein the light radiating section is surrounded by a light collecting section formed at an

inner surface thereof with a Cr-coated reflecting film in order to prevent light radiated from the LEDs having wavelength about 630 to 660nm and brightness about 2000 to 4000mcd from being dispersed into an exterior and in order to make linear-type light.

5

6. The alopecia healing apparatus as claimed in claim 1, wherein the laser radiating section includes a laser source installed at a rear portion of a cylindrical member and a lens section installed at a front portion of the cylindrical member in order to scatter laser beam radiated from the laser source, low-level laser beam radiated from the laser source is widely scattered by means of the lens section.

10

7. The alopecia healing apparatus as claimed in claim 1, wherein the vibration device includes a vibrator motor capable of vibrating itself.

15

8. The alopecia healing apparatus as claimed in claim 1, wherein the power source includes a chargeable battery, a charge terminal is formed at a lower end of the case, and an adapter is provided to charge the chargeable battery by receiving the case therein.

20

9. The alopecia healing apparatus as claimed in claim 1 or 6, wherein low-level laser beam includes He-Ne laser beam having wavelength about 630 to 660nm.

25

10. The alopecia healing apparatus as claimed in claim 1 or 6, wherein low-level laser beam includes Ga-As laser beam having wavelength about 790 to 904nm.

30

11. An alopecia healing apparatus having a light radiating section and a laser radiating section, wherein the alopecia healing apparatus continuously

repeats a cycle including a first step of repeatedly switching on/off the light radiating section for 30 seconds as a vibration device is operated and a second step of radiating light for 30 seconds by using the light radiating section.